APPLE'S NEW STRATEGY • OIL FROM RUSSIA? • HOW BOSSES KEEP FIT

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# FORTUNE

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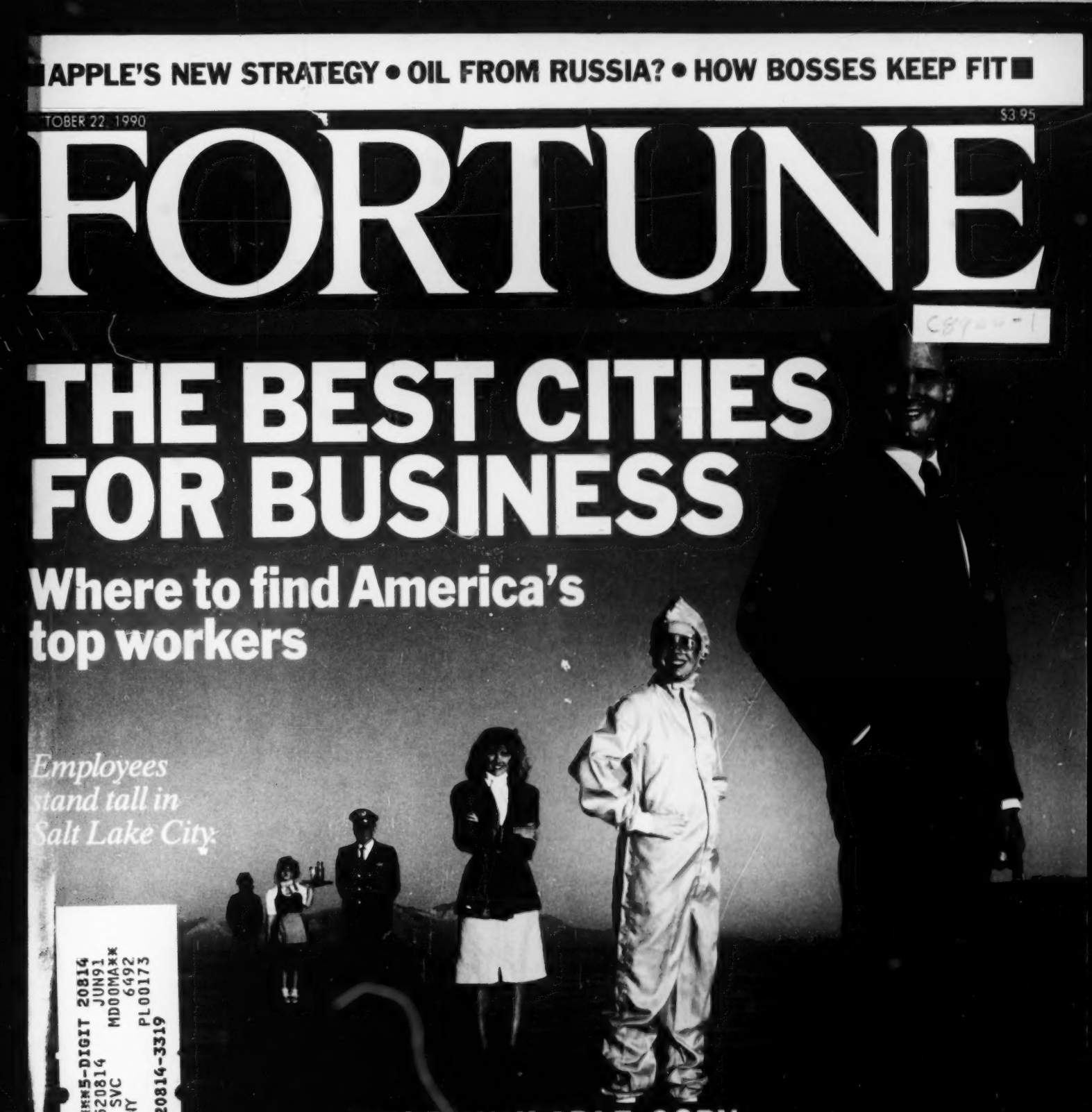
# THE BEST CITIES FOR BUSINESS

## Where to find America's top workers



*Employees stand tall in Salt Lake City.*

BEST AVAILABLE COPY

### THE TEN LEADERS FOR LABOR

1 Salt Lake City
2 The Twin
3 Atl
4
6 Columbus
7 Dallas/Fort Worth
Phoenix
Jacksonville
Oklahoma City

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OCTOBER 22, 1990

VOL. 122, NO. 10

# FORTUNE

**ABOVE: Louis Psihoyos (Matrix) took this photo of engineers in clean suits in Old Sacramento.**

**COVER: Workers like these keep companies in Salt Lake City out of deep water. Photographed by Psihoyos on the Great Salt Lake.**

**"Availability and quality of labor are turning into the No. 1 issue for companies considering whether and where to relocate."** PAGE 48

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**"If we're going to have any kind of country at all, we've got to take care of our biggest natural resource, our kids."**

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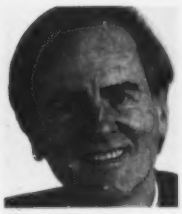

**"Apple always does its best when its back is to the wall."**

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**"You shouldn't have costs in good times, especially people-related costs, you're not prepared to carry in bad times."**

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**"We are ready to embark on large-scale [oil] exploration, production, and refinery projects now."**

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# EDITOR'S DESK

WHEN Commerce Secretary Robert Mosbacher invited the CEOs of 14 U.S. companies to accompany him on a four-day trade mission to the Soviet Union, FORTUNE publisher Jim Hayes found himself the only executive of a media outfit along for the ride. He and Washington correspondent Ann Reilly Dowd attended meetings between top-level Soviet officials and the Americans.

What they saw and heard is reflected in an article by Hayes, "Wanna Make a Deal in Moscow?" (page 113). As far as anyone around here can remember, it's the first time our pages have been graced with an effort by the magazine's publisher, who usually confines himself to running business operations—advertising sales, circulation, and marketing.

"There is an amazing consensus among the Soviets that they must change to survive," Hayes reports. But for all their economic desperation, officials in Moscow and Leningrad insisted they didn't want handouts. "They would say, 'Don't give us foreign aid. It will only feed the bureaucracy that has been resisting our efforts to change.' "

They were looking for other kinds of money, though. Ann Reilly Dowd noted their single-mindedness about oil exploration. At nearly every meeting, officials from Gorbachev on down steered the conversation to this favorite topic. Says Dowd: "It was clear that the Russians' top priority is attracting U.S. investment in oil and gas. It's the key to getting hard currency, to getting food on the shelf."

The Soviets' new willingness to cooperate with U.S. companies in exploring what may be the world's last great untapped oil fields couldn't come at a better time. Saddam Hussein's invasion of Kuwait was a jarring reminder of the fragility of our sources of petroleum. In "Oil From Russia" (page 115), Dowd examines the opportunities—and pitfalls—in looking for oil in the U.S.S.R.

The CEOs learned firsthand about the shortcomings of the Soviet economic system. After one hard day of meetings, they retreated to the bar of their "luxury" hotel for a round of drinks. "Sorry, no beer today," the bartender informed them. Such privation hasn't scared away prospective European investors. Hayes noted that Moscow was swarming with them, particularly German businessmen. "The Soviet Union is potentially such a huge market," he concludes. "Americans must get in there now."

CHARLIE ARCHAMBAULT

**Jim Hayes and Ann Reilly Dowd in Moscow**

Jim Hayes says that writing the piece was "especially daunting" because he hasn't written an article since high school. "I once dreamed of being a writer for *Sports Illustrated*," he says, "but the only job I could get was as a promotion writer." That led him down the path to sales and on to higher reaches in Time Inc. Magazines. We assured him that he did a lot better than most of our editorial people would trying to prepare a sales presentation.

Dowd suffered no such editorial shyness. She has had major bylined articles in the last five issues of the magazine. That may be a record for a FORTUNE writer.

Marshall Loeb
MANAGING EDITOR

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# FORTUNE'S TOP TEN

The skilled, loyal workers in these choice metropolitan areas are the best you'll find anywhere. They're readily available—and should be for years. ■ *by Patricia Sellers and Antony J. Michels*

ASK A BUNCH OF CEOs about their favorite cities and you'll probably hear them evaluate urban life the same way anyone else would. They love San Francisco for the Bay and the restaurants, Seattle for its mountains and relaxed lifestyle, or perhaps Chicago because it's nearly as charged up as New York but not quite as dirty. Great images carry these particular cities and others a long way, and they will always attract companies. But they are not among FORTUNE's top ten cities for business, because they fall short in what has become the most important draw in corporate relocation: plentiful, high-quality, low-cost labor.

The cities that made the cut aren't necessarily the best known or most adored. Fred Rollins III, marketing chief for Delta Air Lines in Salt Lake City (No. 1), says, "People have a misperception that we're backward, that everyone wears wide-brimmed hats and we're out in the boonies, while in many ways we're very progressive." To escape stereotypes and evaluate labor markets objectively, FORTUNE asked the corporate relocation consulting firm Moran Stahl & Boyer to survey human resources executives in the 50 largest U.S. metropolitan areas. Then FORTUNE and MS&B analyzed all sorts of information that measures worker quality and helps delineate availability not only today but also in the future. Extensive interviews and visits to several of the cities helped FORTUNE rank the top ten.

In reading the profiles, it helps to know what's behind a few important measures. The labor market stress index indicates the availability of workers. The higher the score, the tighter the labor market (the U.S. average is 100). MS&B derived the figures by tracking unemployment, changes in annual wages, and employment growth vs. expansion of the local labor pool since 1984. The U.S. population should increase 4% in the next five years; average 1989 unemployment was 5.3%. The average white-collar salaries for each metro area are for workers in finance, insurance, and real estate. The U.S. average in 1987 was $25,326; the average manufacturing salary was $25,473. In a few cases SAT scores are identical for city and suburbs because these places report only areawide scores. The U.S. average SAT score was 908; the average ACT score was 18.8.

Following the profiles of the ten best cities are descriptions of the remaining 40 metropolitan areas, in alphabetical order.

REPORTER ASSOCIATES *John Labate and Thomas J. Martin*

## 1 SALT LAKE CITY

| | | |
|---|---|---|
| Population 1990 | | 1,089,388 |
| Pop. growth 1990-95 | | 6% |
| Unemployment 1989 | | 4.5% |
| Average ACT scores | city: | 19.5 |
| | suburbs: | 21.3 |
| Average salaries 1987 | manufacturing: | $23,340 |
| | white-collar: | $19,016 |
| Labor market stress index | | 107 |

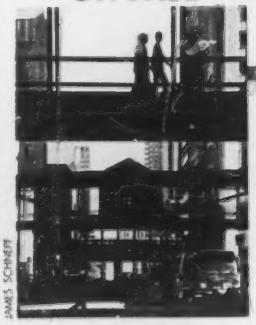
TIM KELLY

**The Mormon Temple**

■ Everyone thinks it's in the middle of nowhere, but Salt Lake City is the only major Western spot within 850 miles of Phoenix, Denver, Seattle, and all major California cities. Its highways are excellent, and the airport is an easy ten-minute ride from downtown. Since Delta made it a hub, Salt Lake City has more flights than any other city its size. Taxes are moderate; city and state carry AAA bond ratings from Moody's. Literacy is the highest in the U.S., but school classes are large even though Utah spends heavily on education. Mormons produce large families, meaning more children per taxpayer. Quality of life is good, particularly if you ski; city buses reach four resorts. Downtown is dead, but a planned $500 million redevelopment should revive it. Liquor laws are loosening. In restaurants, come July, you'll be able to order a drink much as in any other major city.

## 2 MINNEAPOLIS/ ST. PAUL

| | | |
|---|---|---|
| Population 1990 | | 2,462,207 |
| Pop. growth 1990-95 | | 8% |
| Unemployment 1989 | | 3.8% |
| Average ACT scores | city: | 20.1 |
| | suburbs: | 21.8 |
| Average salaries 1987 | manufacturing: | $29,823 |
| | white-collar: | $25,449 |
| Labor market stress index | | 107 |



JAMES SCHAFF

**Downtown skyways**

■ Out-of-the-way, self-reliant, civic-minded, and Democratic, this urban pocket on the Northern Plains reflects the values of the Scandinavians who settled in the area. Painfully high corporate and personal income taxes go for heavy expenditures on education, welfare, transportation, and parks. The system works. Minneapolis/St. Paul is among America's cleanest, safest metropolitan areas. Schools are outstanding. Businesses here shell out for status: 135 companies donate at least 2% of pretax profits to charities or local arts groups, and 25 give 10% or more. Minneapolis is Protestant, slightly funky, fun, the main business center. St. Paul is Roman Catholic, the state capital, and the site of more private liberal arts colleges per capita than any other U.S. city. Homogeneity is declining; minorities are 5% of the work force, 15% of schoolchildren. Average January temperature: 12° F.

Sources: Pop. and pop. growth—National Planning Data Corp.; unemployment—BLS; SAT/ACT scores—local agencies and school districts; salaries—Census Bureau

## 3 ATLANTA

| | | |
|---|---|---|
| Population 1990 | | 2,872,060 |
| Pop. growth 1990-95 | | 13% |
| Unemployment 1989 | | 5.1% |
| Average SAT scores | city: | 728 |
| | suburbs: | 900 |
| Average salaries 1987 | manufacturing: | $25,795 |
| | white-collar: | $27,242 |
| Labor market stress index | | 100 |

ANN STATES—SABA

Marta cuts through town.

■ The hub of the South is not too Southern anymore. Local bigwigs—surprisingly few of them native Georgians—boast of the area's fine climate, affordable housing, first-class international airport and rapid transit, scores of golf courses, and unusually lively social organizations. The city proper is 70% black, and poor, with inferior schools and one of America's highest crime rates. But Atlanta is a city in transition: Amid abandoned buildings off Peachtree Street, a marble-laden IBM tower, a brand-new AT&T building, and other offices scrape the sky. In Buckhead, to the north, million-dollar mansions aren't far from a messy mix of malls, hotels, and corporate centers. Gwinnett County, where Japanese companies cluster, is the fastest-growing in the U.S. Once-again Mayor Maynard Jackson, disliked by business when he served in the Seventies, is making friends. While vowing to refocus on inner-city neighborhoods, he says, "I'm pro-business and pro-growth."

## 4 SACRAMENTO

| | | |
|---|---|---|
| Population 1990 | | 1,460,724 |
| Pop. growth 1990-95 | | 14% |
| Unemployment 1989 | | 4.9% |
| Average SAT scores | city: | 949 |
| | suburbs: | 960 |
| Average salaries 1987 | manufacturing: | $25,513 |
| | white-collar: | $23,867 |
| Labor market stress index | | 100 |

ANDY FREEBERG

California's capitol

■ This is the first major noncoastal California city to make it big on business relocation maps. Besides productive and loyal workers, Sacramento offers homes at half the prices in San Francisco and Los Angeles, and generally better schools. It's also not prone to earthquakes because it doesn't sit on a major fault. In many ways Sacramento is still an unsophisticated agricultural town (you sometimes smell the tomatoes as you drive in from the airport) and sleepy government center, but that's changing fast. Buildings didn't used to get higher than the wedding-cake state capitol, but a 30-story Wells Fargo building will soon supplant sleek, black Renaissance Tower, nicknamed "Darth Vader," as the tallest. Residents drive less than two hours to ski Lake Tahoe, sail San Francisco Bay, or hike the Sierras. A deepwater channel to the Bay makes the city a decent shipping point. Local executives long for better air service: There are no direct flights to New York.

## 5 AUSTIN

| | | |
|---|---|---|
| Population 1990 | | 787,360 |
| Pop. growth 1990-95 | | 12% |
| Unemployment 1989 | | 5.4% |
| Average SAT scores | city: | 930 |
| | suburbs: | 983 |
| Average salaries 1987 | manufacturing: | $25,884 |
| | white-collar: | $20,585 |
| Labor market stress index | | 80 |

STEVEN PUMPHREY

The University of Texas

■ "Austin isn't part of Texas—it's Austin," says Bruce Aumack, personnel manager at IBM's operation there. "It's not isolated or barren—and it's got hills." It's also growing faster and has better schools and lower labor costs than its bigger sisters Dallas and Houston. More of its residents have college degrees than do those of any other of the top 50 areas except Washington, D.C., and San Francisco. The University of Texas at Austin, with 50,000 students, has become one of America's premier research universities and supplies a steady stream of skilled graduates to high-tech employers. That's one reason Sematech and MCC, two major high-tech consortiums, placed operations in Austin. Hurt by state government layoffs in the past decade and by a plunge in its sky-high real estate market, Austin offers plenty of workers and lots of empty office space. And there's no better place to come if you've got a song in your heart: The city's Sixth Street is known for its terrific music scene.

## 6 COLUMBUS

| | | |
|---|---|---|
| Population 1990 | | 1,375,997 |
| Pop. growth 1990-95 | | 6% |
| Unemployment 1989 | | 4.8% |
| Average SAT scores | city: | 910 |
| | suburbs: | 1002 |
| Average salaries 1987 | manufacturing: | $27,509 |
| | white-collar: | $21,454 |
| Labor market stress index | | 100 |

BARTH FALKENBERG

A standout for parks

■ A center for banking, insurance, and finance, Ohio's third-largest metropolis offers affordable housing and good schools in an ethnically diverse city with plenty of recreational facilities and parks. Executives rate it among the most attractive business location sites. Manufacturing salaries are high, white-collar pay is low, and the work ethic is outstanding. Downtown is being resurrected. Columbus City Center, a shopping mall across from the Statehouse, opened last year with big-name stores like Brooks Brothers, Gucci, and Ann Taylor. Less conventional culture is found in the Short North section, marked by art galleries and jazz clubs. The architecture of the $43 million Wexner Center, a visual and performing arts facility named for Limited CEO Leslie Wexner, who gave $25 million, has received more attention than the art inside. Crack remains a problem in the inner city. Traffic is getting to be a worry. You can fly to Chicago in an hour and New York in 90 minutes.

## 7 DALLAS/ FORT WORTH

| | | |
|---|---|---|
| Population 1990 | | 3,923,388 |
| Pop. growth 1990-95 | | 10.5% |
| Unemployment 1989 | | 5.5% |
| Average SAT scores | city: | 794 |
| | suburbs: | 963 |
| Average salaries 1987 | manufacturing: | $27,450 |
| | white-collar: | $26,237 |
| Labor market stress index | | 100 |

JAY BROUSSEAU

Las Colinas

■ The Metroplex, as this vast nine-county stretch of land is known, attracted 66,000 newcomers last year. The big draws: affordable homes, low state and local taxes, and the smell of economic recovery. Exxon recently moved headquarters from Manhattan to Las Colinas, a fancy office, residential, and retail development near the airport with Venetian canals and four 18-hole golf courses. Other prime business spots: northern suburbs like Richardson and Plano, which have the good schools that Dallas and Fort Worth proper lack. First-class office space in the suburbs is a bargain at $11.50 a square foot. Executives who work in downtown Dallas are best off living nearby in Highland Park or University Park, oases within the city that have their own governments, police forces, and schools. Weekends aren't what they used to be since the Cowboys fell off their horse. There's not a whole lot to do for recreation deep in the heart of hot, humid Texas.

## 8 PHOENIX

| | | |
|---|---|---|
| Population 1990 | | 2,130,850 |
| Pop. growth 1990-95 | | 14% |
| Unemployment 1989 | | 4.3% |
| Average SAT scores | city: | 944 |
| | suburbs: | 992 |
| Average salaries 1987 | manufacturing: | $26,475 |
| | white-collar: | $24,403 |
| Labor market stress index | | 93 |

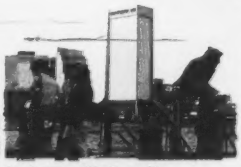
REED BAHN

Acres of affordable homes

■ A steady influx of newcomers will keep the labor force growing faster than jobs, guaranteeing a loose labor market despite the city's low unemployment rate. Schools excel, workers are well educated, and a large community college system answers business's needs. Just a handful of FORTUNE 500 headquarters means you'll probably have to look elsewhere for executives, but you can stay close to home for other employees, among the least unionized in the 50 areas studied. The population is 80% white, 13% Hispanic, 3% black. Office and residential real estate is remarkably inexpensive, the result of overbuilding and of Arizona's many S&L failures. The city is full of vacant lots, and air pollution is still a problem, but the mountains are within easy reach. Sections of a much-needed 230-mile freeway project are complete, relieving traffic within the city. Sky Harbor International Airport is slated to open a $26 million international concourse in February.

## 9 JACKSONVILLE

| | | |
|---|---|---|
| Population 1990 | | 941,485 |
| Pop. growth 1990-95 | | 12% |
| Unemployment 1989 | | 5.7% |
| Average SAT scores | city: | 901 |
| | suburbs: | 901 |
| Average salaries 1987 | manufacturing: | $22,083 |
| | white-collar: | $24,647 |
| Labor market stress index | | 87 |



BUD LEE

Jacksonville Landing

■ A Florida success story without scads of tourists and retirees? That's right. A fast-growing center for service companies of all stripes, especially financial services firms, the area receives steady in-migration, keeping wages low and the labor market loose. The median age is a young 32. Schools aren't exceptional, and fewer than 17% of residents have college degrees, but Florida's generous job training programs and low taxes help compensate. Drugs are a problem, and crime rates are high. Downtown has brightened with the arrival of Jacksonville Landing, a shopping and eating development designed by Rouse Co., beside the St. Johns River. Winters are mild, summers uncomfortably hot and humid. On bad days you may be hit by the odor of two nearby paper mills and chemical plants—"the smell of money," natives used to joke—a reminder of slow-growth, economically depressed days. The city's free annual jazz festival is a better symbol of its condition.

## 10 OKLAHOMA CITY

| | | |
|---|---|---|
| Population 1990 | | 961,034 |
| Pop. growth 1990-95 | | -1% |
| Unemployment 1989 | | 4.6% |
| Average ACT scores | city: | 15 |
| | suburbs: | 21 |
| Average salaries 1987 | manufacturing: | $28,008 |
| | white-collar: | $21,142 |
| Labor market stress index | | 80 |

GAYLORD HERRON

Myriad Gardens

■ "America's back-office frontrunner," as the city touts itself, is working hard to attract service industries to revitalize an economy sapped by the long energy slump. With many residents unemployed or overqualified for their positions, white-collar wages are low. The housing and commercial real estate markets are a buyer's paradise, and although inner-city public schools are substandard, the city and state offer some of America's best job training and adult education. The city limits enclose a sweeping 624 square miles. The downtown redeveloped by I. M. Pei isn't buzzing with activity, but the elongated botanical walkway in Myriad Gardens and the Omniplex planetarium offer New Age leisure-time alternatives to the National Cowboy Hall of Fame. Or head out to Remington Park, the city's new $93 million thoroughbred racetrack. Area colleges have 106,000 students. Winters are short and mild, summers long and hot, steaks thick and well done.

# THE REST OF THE MAJOR CITIES

## ALBANY, NEW YORK

■ Slow growth typical of older Northeastern cities, low unemployment, and the difficulty of getting anyone outside state government to move there may turn companies away from New York's capital. But excellent public schools—test scores are well above average in both inner city and suburbs—plus a highly rated state university and white-collar salaries among the lowest in the top 50 metro areas make the city worth a second look.

| | | |
|---|---|---|
| Population 1990 | | 856,466 |
| Pop. growth 1990-95 | | 2% |
| Unemployment 1989 | | 4.2% |
| Average SAT scores | city: | 956 |
| | suburbs: | 1056 |
| Average salaries 1987 | manufacturing: | $25,219 |
| | white collar: | $21,284 |
| Labor market stress index | | 93 |

## BALTIMORE

■ Labor costs in Baltimore are near the national average but lower than in many Northeastern and Midwestern cities, making the area attractive if it's important to locate your business in the New York City–Washington corridor and gain access to a highly skilled labor force. Steady population growth is also a plus. Inner-city education continues to be a problem, with SAT scores trailing those in the suburbs by almost 200 points.

| | | |
|---|---|---|
| Population 1990 | | 2,389,385 |
| Pop. growth 1990-95 | | 5% |
| Unemployment 1989 | | 4.0% |
| Average SAT scores | city: | 754 |
| | suburbs: | 945 |
| Average salaries 1987 | manufacturing: | $27,369 |
| | white collar: | $25,381 |
| Labor market stress index | | 100 |

## BIRMINGHAM, ALABAMA

■ Steeped in the spirit of the Old South, Birmingham has high unemployment, low average salaries, and a low cost of living—all potential attractions for an employer. But the population is among the least educated in the top 50 metro areas, with fewer than 70% possessing a high school diploma and only 16% with a college degree (vs. 20% for the nation). Slow population growth and poor marks for labor quality are other disadvantages.

| | | |
|---|---|---|
| Population 1990 | | 931,129 |
| Pop. growth 1990-95 | | 2% |
| Unemployment 1989 | | 5.7% |
| Average ACT scores | city: | 16.4 |
| | suburbs: | 22 |
| Average salaries 1987 | manufacturing: | $21,719 |
| | white collar: | $22,437 |
| Labor market stress index | | 113 |

## BOSTON

■ Full of the best and the brightest—only Washington, D.C., has a greater percentage of highly skilled workers—this remains an expensive place to live and do business, with white-collar salaries ranking fourth from the top. Weakness in the defense, high-tech, and real estate industries has loosened the tight labor market, but population growth is nil. The poor quality of inner-city education is another drawback for employers.

| | | |
|---|---|---|
| Population 1990 | | 2,848,981 |
| Pop. growth 1990-95 | | 0% |
| Unemployment 1989 | | 3.4% |
| Average SAT scores | city: | 764 |
| | suburbs: | 998 |
| Average salaries 1987 | manufacturing: | $28,176 |
| | white collar: | $28,589 |
| Labor market stress index | | 120 |

## BUFFALO

■ Despite a declining population and the highest net rate of out-migration from 1980 to 1988 of any of the 50 largest metro areas (8%), Buffalo is full of college students whose skills are waiting to be tapped. Above-average unemployment and many underemployed workers are other draws for prospective employers. Beware of higher-than-average manufacturing wages, though, and a work force that is almost one-third unionized.

| | | |
|---|---|---|
| Population 1990 | | 949,293 |
| Pop. growth 1990-95 | | -3% |
| Unemployment 1989 | | 5.8% |
| Average SAT scores | city: | N.A. |
| | suburbs: | 969 |
| Average salaries 1987 | manufacturing: | $26,814 |
| | white collar: | $23,209 |
| Labor market stress index | | 87 |

## CHARLOTTE, NORTH CAROLINA

■ Developing into a financial services center and distribution hub in the Southeast, Charlotte has made a smooth transition from heavy dependence on textile manufacturing. Disadvantages: overall low unemployment and a tight market for hourly laborers, plus below-average school scores. But robust growth, low salaries, high quality of life, and a top-notch community college system should continue to attract companies.

| | | |
|---|---|---|
| Population 1990 | | 1,147,393 |
| Pop. growth 1990-95 | | 8% |
| Unemployment 1989 | | 3.2% |
| Average SAT scores | city: | 865 |
| | suburbs: | 792 |
| Average salaries 1987 | manufacturing: | $21,177 |
| | white collar: | $24,673 |
| Labor market stress index | | 113 |

## CHICAGO

■ Whose kind of town? Chicago is a slow-growing city that experienced net out-migration of nearly 4% from 1980 to 1988. Labor costs are high and so is union membership, giving companies seeking a Midwestern location reason to look elsewhere. The center city continues to struggle, as the low average test scores suggest. While unemployment is above average, companies surveyed rated labor availability lower than in other big cities.

| | | |
|---|---|---|
| Population 1990 | | 6,259,615 |
| Pop. growth 1990-95 | | 1% |
| Unemployment 1989 | | 5.5% |
| Average ACT scores | city: | 13.6 |
| | suburbs: | 21.4 |
| Average salaries 1987 | manufacturing: | $27,204 |
| | white collar: | $30,229 |
| Labor market stress index | | 107 |

## CINCINNATI

■ Breaking out of its industrial mold and building a service-oriented economy, Cincinnati offers low white-collar wages and a pleasant style of life. Although the proportion of highly skilled workers in the labor force is below the nation's average, employers say the prevailing work ethic is worth a lot. But don't disregard high manufacturing wages, relatively slow population growth, and discouraging inner-city test scores.

| | | |
|---|---|---|
| Population 1990 | | 1,469,493 |
| Pop. growth 1990-95 | | 3% |
| Unemployment 1989 | | 4.5% |
| Average SAT scores | city: | 879 |
| | suburbs: | 996 |
| Average salaries 1987 | manufacturing: | $29,857 |
| | white collar: | $22,122 |
| Labor market stress index | | 107 |

## CLEVELAND

■ The metro area's population is declining, and the number of 18- to 24-year-olds—the labor force's seedlings—is projected to dip more sharply here than in any other city but Pittsburgh by 1995. That's not surprising for a city with one of the highest net out-migration rates from 1980 to 1988. Test scores show the wide disparity between city and suburbs, but there's evidence of economic revival, and white-collar wages are low.

| | | |
|---|---|---|
| Population 1990 | | 1,842,553 |
| Pop. growth 1990-95 | | -2% |
| Unemployment 1989 | | 4.8% |
| Average SAT scores | city: | 739 |
| | suburbs: | 966 |
| Average salaries 1987 | manufacturing: | $28,641 |
| | white-collar: | $22,923 |
| Labor market stress index | | 107 |

## DAYTON

■ A bustling blue-collar city where much of the work force is in automotive parts manufacturing, Dayton experienced net out-migration in the past decade but should have slow growth in the Nineties. While manufacturing wages are high, white-collar salaries are third lowest in the 50 largest cities. Schools are good, and as the economy shifts toward more service jobs, employers can draw on spouses at Wright-Patterson Air Force Base.

| | | |
|---|---|---|
| Population 1990 | | 958,196 |
| Pop. growth 1990-95 | | 2% |
| Unemployment 1989 | | 5.1% |
| Average SAT scores | city: | 962 |
| | suburbs: | 1007 |
| Average salaries 1987 | manufacturing: | $29,022 |
| | white-collar: | $20,020 |
| Labor market stress index | | 93 |

## DENVER

■ For business, Rocky Mountain high means a mixed bag of high salaries, high SAT scores, and lots of highly educated and skilled workers. The Denver economy hasn't fully recovered from the energy slump of the Eighties, unemployment is average, and labor quality received good marks in executive surveys. Despite slow growth, companies questioned rated the city tops in labor availability. A contender for the top ten.

| | | |
|---|---|---|
| Population 1990 | | 1,656,279 |
| Pop. growth 1990-95 | | 3% |
| Unemployment 1989 | | 5.4% |
| Average SAT scores | city: | 928 |
| | suburbs: | 976 |
| Average salaries 1987 | manufacturing: | $29,660 |
| | white-collar: | $27,112 |
| Labor market stress index | | 93 |

## DETROIT

■ Like the auto industry that keeps its economy running, the city is in bad shape and a weak candidate as a place to start or relocate a business, despite sky-high unemployment. The inner city is a nightmare, with test scores far below those in the suburbs. A forecast of no population growth in the next five years offsets the low labor market stress index. Manufacturing wages are the nation's highest, fueled by the Big Three.

| | | |
|---|---|---|
| Population 1990 | | 4,359,173 |
| Pop. growth 1990-95 | | 0% |
| Unemployment 1989 | | 7.1% |
| Average ACT scores | city: | 12.8 |
| | suburbs: | 19.9 |
| Average salaries1987 | manufacturing: | $33,935 |
| | white-collar: | $24,066 |
| Labor market stress index | | 93 |

## GREENSBORO, NORTH CAROLINA

■ If you're looking for some of America's lowest labor costs, Greensboro might be the place. Students overwhelmingly go to public rather than private schools, but the education system is subpar, and a lower than average proportion of residents have high school and college diplomas. Employers rate their workers quite favorably. Unemployment is low, but strong population growth should replenish the labor force.

| | | |
|---|---|---|
| Population 1990 | | 943,916 |
| Pop. growth 1990-95 | | 5% |
| Unemployment 1989 | | 3.3% |
| Average SAT scores | city: | 854 |
| | suburbs: | 855 |
| Average salaries 1987 | manufacturing: | $21,293 |
| | white-collar: | $20,203 |
| Labor market stress index | | 107 |

## HARTFORD

■ Smallest of the top 50 metropolitan areas, Hartford comes up short in benefits for business. Low unemployment and slow projected population growth mean the labor market is tight and likely to stay that way. The city has the smallest percentage of underemployed workers in the top 50. Wages are high, and 34% of the work force is unionized, compared with 24% on average for all 50 cities. Inner-city test scores are low.

| | | |
|---|---|---|
| Population 1990 | | 764,054 |
| Pop. growth 1990-95 | | 3% |
| Unemployment 1989 | | 3.3% |
| Average SAT scores | city: | 701 |
| | suburbs: | 911 |
| Average salaries 1987 | manufacturing: | $28,719 |
| | white-collar: | $25,552 |
| Labor market stress index | | 113 |

## HOUSTON

■ The city continues to recover from the oil crunch of the 1980s, and the increase in jobs should greatly outpace labor force expansion as the revival progresses. That could produce a tight labor market; unemployment is above average and population growth slow. Despite the energy slump, wages have remained high in Houston, making the city attractive for workers who can take advantage of low housing costs.

| | | |
|---|---|---|
| Population 1990 | | 3,260, 646 |
| Pop. growth 1990-95 | | 2% |
| Unemployment 1989 | | 5.9% |
| Average SAT scores | city: | 855 |
| | suburbs: | 955 |
| Average salaries 1987 | manufacturing: | $30,795 |
| | white-collar: | $28,870 |
| Labor market stress index | | 107 |

## INDIANAPOLIS

■ This Midwestern capital is shifting smoothly from a manufacturing base to a more diversified, service-oriented economy. Labor in Indy is tight, with low unemployment, but moderate growth and the availability of workers from outside the metro area should ease the situation. A unified government helps narrow the gap between city and suburban education. The proportion of residents in college is lower than average.

| | | |
|---|---|---|
| Population 1990 | | 1,261,073 |
| Pop. growth 1990-95 | | 5% |
| Unemployment 1989 | | 3.9% |
| Average SAT scores | city: | 876 |
| | suburbs: | 936 |
| Average salaries 1987 | manufacturing: | $28,757 |
| | white-collar: | $22,940 |
| Labor market stress index | | 120 |

## KANSAS CITY, MISSOURI

■ Employers like the Kansas City work ethic, and several regional and national companies have recently moved back-office operations there. K.C. also has a diverse manufacturing sector. Wages are about average, the population should grow steadily, and the cost of living is below the norm. The city is a rail transportation hub and has more than 200 flights daily. On the downside: City schools are far worse than those in the suburbs.

| | | |
|---|---|---|
| Population 1990 | | 1,612,035 |
| Pop. growth 1990-95 | | 6% |
| Unemployment 1989 | | 4.9% |
| Average ACT scores | city: | 14.1 |
| | suburbs: | 22 |
| Average salaries 1987 | manufacturing: | $26,766 |
| | white-collar: | $25,210 |
| Labor market stress index | | 107 |

## LOS ANGELES

■ Bigger, in L.A.'s case, *can* mean better, if loads of available labor is what you need. America's largest metro area is one of the few where labor force growth is projected to exceed job increases. Continued strong growth in population, fueled by heavy immigration, plus layoffs in the defense and aerospace industries, makes for a loose labor market. But costs of living and labor are high, inner-city schools are weak, and air quality is poor.

| | | |
|---|---|---|
| Population 1990 | | 8,904,692 |
| Pop. growth 1990-95 | | 9% |
| Unemployment 1989 | | 4.7% |
| Average SAT scores | city: | 817 |
| | suburbs: | 927 |
| Average salaries 1987 | manufacturing: | $26,445 |
| | white-collar: | $27,968 |
| Labor market stress index | | 100 |

## LOUISVILLE, KENTUCKY

■ A population that isn't increasing and a steep falloff in the number of 18- to 24-year-olds by 1995 could spell trouble even as Louisville sheds some of its blue-collar image and becomes more service oriented. Companies attract workers from outside the area. Attractions: low white-collar salaries and above-average suburban schools. But the proportion of high school and college graduates is below average, and manufacturing wages are high.

| | | |
|---|---|---|
| Population 1990 | | 968,758 |
| Pop. growth 1990-95 | | 0% |
| Unemployment 1989 | | 5.5% |
| Average ACT scores | city: | 17.2 |
| | suburbs: | 19.9 |
| Average salaries 1987 | manufacturing: | $27,519 |
| | white-collar: | $21,878 |
| Labor market stress index | | 100 |

## MEMPHIS

■ Don't expect to find many highly skilled or highly educated workers here. But if you're looking for a city growing at a healthy clip with plenty of available labor and low manufacturing wages, this could be it. One of the largest wholesale and distribution centers in the South, Memphis is home to Federal Express. The cost of living is below the national average, and the proportion of workers who are unionized is small.

| | | |
|---|---|---|
| Population 1990 | | 996,323 |
| Pop. growth 1990-95 | | 5% |
| Unemployment 1989 | | 4.7% |
| Average ACT scores | city: | 14.9 |
| | suburbs: | 21.1 |
| Average salaries 1987 | manufacturing: | $21,766 |
| | white-collar: | $25,966 |
| Labor market stress index | | 80 |

## MIAMI, FLORIDA

■ Not for everyone, Miami could be right for certain low-tech manufacturers or service providers. Only 32% of workers are employed in highly skilled jobs, the lowest proportion in all 50 areas, and manufacturing salaries are also the lowest of all 50. Heavy in-migration spurs population growth. Schools are a problem and crime rates high. The economy is increasingly dependent on foreign markets, especially Latin America.

| | | |
|---|---|---|
| Population 1990 | | 1,854,157 |
| Pop. growth 1990-95 | | 6% |
| Unemployment 1989 | | 6.4% |
| Average SAT scores | city: | 843 |
| | suburbs: | 843 |
| Average salaries 1987 | manufacturing: | $17,827 |
| | white-collar: | $24,278 |
| Labor market stress index | | 80 |

## MILWAUKEE

■ Still thoroughly blue-collar, Milwaukee means making machinery and brewing beer. Manufacturing wages are above average, and the work force is highly unionized. As in other Midwestern areas with slow growth and low unemployment, the number of 18- to 24-year-olds will probably decline sharply. Mediocre test scores might benefit from a new state voucher program allowing students to select public or private schools.

| | | |
|---|---|---|
| Population 1990 | | 1,401,580 |
| Pop. growth 1990-95 | | 1% |
| Unemployment 1989 | | 3.8% |
| Average ACT scores | city: | 16.6 |
| | suburbs: | 20.8 |
| Average salaries 1987 | manufacturing: | $27,390 |
| | white-collar: | $24,139 |
| Labor market stress index | | 113 |

## NASHVILLE

■ Country music fans may be drawn to the home of the Grand Ole Opry, but businesses face unpleasant music there: a tight labor market and an unemployment rate among the lowest of all 50 areas. Nashville's charms include low salaries, a below-average cost of living, and powerful population growth and in-migration. Competition for labor may intensify in the future, however, pushing up wages.

| | | |
|---|---|---|
| Population 1990 | | 1,005,609 |
| Pop. growth 1990-95 | | 9% |
| Unemployment 1989 | | 3.8% |
| Average ACT scores | city: | 17.3 |
| | suburbs: | 19.2 |
| Average salaries 1987 | manufacturing: | $23,190 |
| | white-collar: | $23,131 |
| Labor market stress index | | 107 |

## NEW ORLEANS

■ Mardi Gras aside, New Orleans offers little to cheer about. The port city's economy has not fully healed from the energy slump. Unemployment is extreme and white-collar salaries are low; expect a sharp decline in new entrants to the labor force as outmigration erodes the population. Educational attainment is not high. Test scores are low, and the percentage of students attending public schools is the lowest of any in this group.

| | | |
|---|---|---|
| Population 1990 | | 1,294,884 |
| Pop. growth 1990-95 | | -3% |
| Unemployment 1989 | | 7.1% |
| Average ACT scores | city: | 13.8 |
| | suburbs: | 18.8 |
| Average salaries 1987 | manufacturing: | $26,662 |
| | white-collar: | $22,238 |
| Labor market stress index | | 80 |

## NEW YORK CITY

■ If you have a choice, think twice before picking the Big Apple. Wages are America's highest, the crime wave continues, and inner-city education is a shambles. The city leads the nation in immigration but has the second-worst labor participation rate of all 50 areas (more a sign of social problems than job scarcity). Though considered a must location for certain professions, many professionals may leave if conditions don't improve.

| | | |
|---|---|---|
| Population 1990 | | 8,630,058 |
| Pop. growth 1990-95 | | 1% |
| Unemployment 1989 | | 5.4% |
| Average SAT scores | city: | 788 |
| | suburbs: | 940 |
| Average salaries 1987 | manufacturing: | $26,817 |
| | white-collar: | $41,420 |
| Labor market stress index | | 100 |

## NORFOLK, VIRGINIA

■ A city whose star is rising, Norfolk can expect double-digit population growth that will expand the labor force faster than jobs increase—a bonus for business. Norfolk's military bases mean a large number of spouses available for clerical work, and white-collar wages here are lower than in any place examined but Salt Lake City. The area's excellent quality of life is another reason companies should wake up and notice this sleeper.

| | | |
|---|---|---|
| Population 1990 | | 1,430,506 |
| Pop. growth 1990-95 | | 10% |
| Unemployment 1989 | | 4.6% |
| Average SAT scores | city: | 907 |
| | suburbs: | 868 |
| Average salaries 1987 | manufacturing: | $24,318 |
| | white-collar: | $19,514 |
| Labor market stress index | | 73 |

## ORLANDO, FLORIDA

■ Increasing at a rate unmatched by any of the other 50 cities except West Palm Beach, Orlando's population is employed chiefly in services that revolve around the mass of tourists who flock to Disney World and other attractions. The economy is diversifying and booming, pushing wages up, but continued in-migration should keep salaries below average. Many residents are underemployed, another advantage for companies.

| | | |
|---|---|---|
| Population 1990 | | 1,034,086 |
| Pop. growth 1990-95 | | 17% |
| Unemployment 1989 | | 5.1% |
| Average SAT scores | city: | 893 |
| | suburbs: | 920 |
| Average salaries 1987 | manufacturing: | $24,913 |
| | white-collar: | $22,509 |
| Labor market stress index | | 93 |

## PHILADELPHIA

■ Even with its serious fiscal crisis, Philly still stands out. The city has a large, well-rounded economy, and wages and other business costs are lower than in other major Northeastern centers. Slow population growth and low unemployment result in a slightly tight labor market. The city is trying to improve inner-city schools, which is a good idea—fewer students attend public school here than in almost any city among the 50.

| | | |
|---|---|---|
| Population 1990 | | 4,982,607 |
| Pop. growth 1990-95 | | 3% |
| Unemployment 1989 | | 3.8% |
| Average SAT scores | city: | 779 |
| | suburbs: | 941 |
| Average salaries 1987 | manufacturing: | $26,885 |
| | white-collar: | $25,870 |
| Labor market stress index | | 107 |

## PITTSBURGH

■ Pittsburgh has taken big steps toward becoming a high-tech center with the aid of Carnegie Mellon and the University of Pittsburgh, but out-migration continues as the economy struggles. The projected population decline over the next five years is the largest of any of the areas studied. As job expansion heats up, labor force participation may improve, mitigating the population loss. Attractions: cheap housing and good suburban schools.

| | | |
|---|---|---|
| Population 1990 | | 2,065,074 |
| Pop. growth 1990-95 | | -4% |
| Unemployment 1989 | | 4.6% |
| Average SAT scores | city: | 839 |
| | suburbs: | 990 |
| Average salaries 1987 | manufacturing: | $29,399 |
| | white-collar: | $23,475 |
| Labor market stress index | | 100 |

## PORTLAND, OREGON

■ Packed with pluses, Portland ranks near the top. Beautiful natural surroundings, excellent public schools, a highly educated labor force with a strong work ethic, and wages close to or below average make this a smart alternative to California. The city's recent rapid growth has tightened the labor market. Manufacturing has tended to move with the cycles of the lumber and wood products industries and is dominated by a few players.

| | | |
|---|---|---|
| Population 1990 | | 1,226,733 |
| Pop. growth 1990-95 | | 7% |
| Unemployment 1989 | | 4.5% |
| Average SAT scores | city: | 915 |
| | suburbs: | 968 |
| Average salaries 1987 | manufacturing: | $25,433 |
| | white-collar: | $22,044 |
| Labor market stress index | | 120 |

## RICHMOND

■ The labor outlook in Virginia's attractive capital is less than a knockout, despite projected population growth. Costs, especially manufacturing wages, are higher than in many Southern cities, and unemployment is among the lowest in the 50 areas. A high percentage of students go to the public schools, but the gap between city and suburban test scores suggests trouble. A low percentage of residents have high school diplomas.

| | | |
|---|---|---|
| Population 1990 | | 864,592 |
| Pop. growth 1990-95 | | 7% |
| Unemployment 1989 | | 3.6% |
| Average SAT scores | city: | 762 |
| | suburbs: | 929 |
| Average salaries 1987 | manufacturing: | $29,356 |
| | white-collar: | $24,285 |
| Labor market stress index | | 107 |

## ROCHESTER, NEW YORK

■ With population not expected to increase, net out-migration, and low unemployment, Rochester resembles its New York brethren Albany and Buffalo. Manufacturing wages are among the highest in the 50 areas studied, thanks in part to large resident employers such as Eastman Kodak and Bausch & Lomb. The area is noted for corporate involvement in educational reform and for the top-notch quality of its highly unionized work force.

| | | |
|---|---|---|
| Population 1990 | | 980,221 |
| Pop. growth 1990-95 | | 0% |
| Unemployment 1989 | | 4.2% |
| Average SAT scores | city: | 817 |
| | suburbs: | 997 |
| Average salaries 1987 | manufacturing: | $31,071 |
| | white-collar: | $22,886 |
| Labor market stress index | | 100 |

## ST. LOUIS

■ A slow-growing city with a loose labor market, St. Louis is a major hub for transportation by air, water, and rail. Manufacturing wages are high, reflecting the industrial presence of McDonnell Douglas, General Motors, and Chrysler, among others. The contrast in quality between suburban and city schools is among the starkest in the U.S. Universities are a strong presence in the community, and the work ethic shines.

| | | |
|---|---|---|
| Population 1990 | | 2,489,411 |
| Pop. growth 1990-95 | | 2% |
| Unemployment 1989 | | 5.5 |
| Average SAT scores | city: | 789 |
| | suburbs: | 1023 |
| Average salaries 1987 | manufacturing: | $29,459 |
| | white-collar: | $23,366 |
| Labor market stress index | | 93 |

## SAN ANTONIO

■ If you can take the heat, take the bait San Antonio holds out: a plentiful supply of labor at low cost, one result of the highest unemployment rate of the 50 areas studied. Strong population growth should keep labor available. Residents overall are not highly skilled but could fit the needs of companies seeking nontechnical assembly or light manufacturing labor. Costs of living and housing are low, but the schools need improvement.

| | | |
|---|---|---|
| Population 1990 | | 1,368,438 |
| Pop. growth 1990-95 | | 9% |
| Unemployment 1989 | | 7.3% |
| Average SAT scores | city: | 743 |
| | suburbs: | 910 |
| Average salaries 1987 | manufacturing: | $20,298 |
| | white-collar: | $22,771 |
| Labor market stress index | | 73 |

## SAN DIEGO

■ Growing in population even faster than Los Angeles, San Diego will likely add more workers than jobs in the next five years, easing the labor market. The economy, long reliant on the Navy and defense-related industries, is beginning to diversify. Quality of life is high, with beautiful beaches and an ideal climate. But take heed: Employers have been known to complain about the laid-back California work ethic.

| | | |
|---|---|---|
| Population 1990 | | 2,508,993 |
| Pop. growth 1990-95 | | 15% |
| Unemployment 1989 | | 3.9% |
| Average SAT scores | city: | 904 |
| | suburbs: | 955 |
| Average salaries 1987 | manufacturing: | $26,954 |
| | white-collar: | $26,475 |
| Labor market stress index | | 100 |

## SAN FRANCISCO BAY AREA

■ Be prepared to pay dearly to do business by the Bay. Labor, if you can find it, is expensive, especially white-collar workers. The cost of housing is the highest in the 50 areas, with a four-bedroom home selling for $462,800, according to a recent study by Runzheimer International. But locate here anyway if you need particularly well-educated and skilled workers in a center of finance, high technology, and R&D.

| | | |
|---|---|---|
| Population 1990 | | 5,156,572 |
| Pop. growth 1990-95 | | 6.1% |
| Unemployment 1989 | | 3.3% |
| Average SAT scores | city: | 855 |
| | suburbs: | 958 |
| Average salaries 1987 | manufacturing: | $29,124 |
| | white-collar: | $31,810 |
| Labor market stress index | | 107 |

## SEATTLE

■ Most of the good things you've heard are true. A large proportion of Seattle's growing population have a high school diploma (even more than in Salt Lake City), schools are superior, and workers are highly skilled. Labor is tight. Manufacturing costs are steep because of Boeing's dominant presence. But the economy is less dependent on the aircraft giant than it used to be and is diversifying into sectors like computer software.

| | | |
|---|---|---|
| Population 1990 | | 1,948,378 |
| Pop. growth 1990-95 | | 11% |
| Unemployment 1989 | | 4.6% |
| Average SAT scores | city: | 944 |
| | suburbs: | 980 |
| Average salaries 1987 | manufacturing: | $31,605 |
| | white-collar: | $24,975 |
| Labor market stress index | | 113 |

## TAMPA

■ Another Florida growth powerhouse built on in-migration, Tampa is persuading businesses to locate offices here and take advantage of the lowest overall salaries in all 50 areas and an affordable cost of living. With over two million people in the metro area and an abundant labor pool augmented by lots of retirees, Tampa competes with Orlando to lure companies. And as in Orlando, the area's economy is driven by tourism.

| | | |
|---|---|---|
| Population 1990 | | 2,079,323 |
| Pop. growth 1990-95 | | 11% |
| Unemployment 1989 | | 5.0% |
| Average SAT scores | city: | 904 |
| | suburbs: | 899 |
| Average salaries 1987 | manufacturing: | $21,930 |
| | white-collar: | $22,934 |
| Labor market stress index | | 87 |

## WASHINGTON, D.C.

■ The capital's problems extend to the labor market, which is tight in the inner city, where the population is diminishing, and also in outlying areas, even though population is increasing. Unemployment is the lowest of the 50 areas studied, and wages are high. Test scores show the contrast between city and suburbs. Washington's economy is diversifying away from government, and its overall work force is highly skilled and educated.

| | | |
|---|---|---|
| Population 1990 | | 3,860,717 |
| Pop. growth 1990-95 | | 9% |
| Unemployment 1989 | | 2.7% |
| Average SAT scores | city: | 707 |
| | suburbs: | 982 |
| Average salaries 1987 | manufacturing: | $27,921 |
| | white-collar: | $24,888 |
| Labor market stress index | | 120 |

## WEST PALM BEACH, FLORIDA

■ People migrated here in the Eighties at a faster rate than in any other of the 50 areas studied, and the population should continue growing fast. Add that to unemployment that is already on the high side and a low labor market stress index, and consider the advantages. Nevertheless, some companies rate work force quality low. Also beware of high manufacturing wages, low school test scores, and a high crime rate. ■

| | | |
|---|---|---|
| Population 1990 | | 873,202 |
| Pop. growth 1990-95 | | 17% |
| Unemployment 1989 | | 6.0% |
| Average SAT scores | city: | 886 |
| | suburbs: | 886 |
| Average salaries 1987 | manufacturing: | $31,346 |
| | white-collar: | $24,792 |
| Labor market stress index | | 87 |

# HOW TO MAKE WORKERS BETTER

America's leading chief executives want more effective employees and have strong views about what will be needed to get them. Step one: Improve the schools. ■ *by Andrew Erdman*

WITH WORK FORCE quality one of the key competitive issues of the 1990s, it's worth asking whether U.S. business is gaining or losing ground. Ask the CEOs of some of America's largest companies, and the response is far from comforting: They're not at all sure.

A plurality—some 39%—feel the nation's work force has improved over the past ten years, despite common complaints that American labor has made the U.S. pathetically uncompetitive. Says Consolidated Papers' George W. Mead: "I frankly have a very high opinion of the work force that I work with and don't believe it could be matched anywhere in the world."

**Q** How has the quality of the U.S. work force changed in the past ten years?

**A**

| | |
|---|---|
| Improved | 39% |
| Grown worse | 34% |
| Stayed the same | 26% |
| Not sure | 1% |

**Q** Do the following institutions or factors improve or worsen the quality of the U.S. work force?

**A**

| | Improves | Worsens | Neither | Both |
|---|---|---|---|---|
| Colleges and universities | 64% | 17% | 19% | * |
| Managerial styles of U.S. companies | 57% | 32% | 10% | 1% |
| Public education system | 13% | 76% | 11% | — |
| Labor unions | 6% | 83% | 10% | 1% |

*Less than 1%.

But some of his peers beg to differ. A disturbing 34% of the brass believe U.S. workers have grown worse in the past decade, while 26% think they have stayed much the same (and 1% aren't sure). The major causes of the decline, say these chief executives, are labor unions and the public education system, which pumps ill-prepared high school graduates into the workplace. Casting stones homeward as well, nearly one-third believe the way U.S. workers are managed is an important factor in why they don't perform better.

**Q** Is your company spending more on educating workers than it did ten years ago, spending less, or spending about the same amount?

**A**

| | |
|---|---|
| More | 91% |
| Less | — |
| About the same | 9% |

These are the most striking findings of the latest FORTUNE 500 CEO Poll. The opinion research firm Clark Martire & Bartolomeo interviewed 206 chief executives of FORTUNE 500 and Service 500 corporations between July 31 and August 8.

While unions were the most frequently criticized obstacle to bettering productivity, corporate leaders were far more vocal about what they considered America's pitiable public education system. "We're graduating kids who can't even read their own diplomas," laments Edward Hennessy Jr. of Allied-Signal, the New Jersey–based aerospace giant. In response Allied has started programs in reading and spelling for its workers and continues to bulk up its other training.

It's not alone. More than 90% of CEOs surveyed indicated that they spend more on educating employees today than they did in 1980. Almost all are committed to the idea that corporations must step in and help educate workers because government hasn't been up to the job. "Management has got to pick up the challenge of education," says E. C. Gwaltney of Russell Corp., one of the largest textile and apparel manufacturers. Referring to the students public schools are turning out, W. W. Sprague Jr. of Savannah Foods & Industries adds, "Business must be involved, since the product we are getting stinks." No kidding: About 20% of Russell's employees are functionally illiterate, according to its chairman. The company offers a wide array of adult education programs.

Little about the way public schools are run appeals to these chief executives. They

**"We're graduating kids who can't even read their own diplomas."**

KEN KERBS

**EDWARD HENNESSY JR. Allied-Signal**

REPORTER ASSOCIATE *Sandra L. Kirsch*

understand competition and think it would shape up the schools: Three-quarters believe parents should be able to choose the school their children will attend instead of having to patronize educational monopolies. Nearly all the CEOs polled favor basing teachers' salaries on performance and seniority, rather than on the latter alone. An object of particular disdain is the tenure system employed by many school boards. NCNB Chairman Hugh McColl says flatly, "Get rid of it."

The CEOs strongly favored certain other proposals for improving the schools:

- Restructure large school districts so they include magnet schools specializing in certain disciplines.
- Keep schools open year round, allowing students to progress at their own pace.
- Eliminate undergraduate teaching degrees. Instead require future teachers to major in an academic field and add a fifth year of instruction emphasizing classroom experience.

The chief executives saw little merit in other proposed reforms, such as abolishing traditional grade levels or creating a national board to certify new teachers. This last idea apparently touched a nerve among the CEOs, who often in these polls have strongly opposed government involvement as a solution to problems. NCNB's McColl says, "Anything the national government gets in, they make a bureaucracy of. They ensure mediocrity." 3M's Allen Jacobson agrees and urges the U.S. to "get rid of excessive government regulation" in order to increase worker productivity.

**Q A** How would you rate the following proposals for reforming U.S. public education?

| | Excellent | Good | Fair | Poor |
|---|---|---|---|---|
| Base teachers' salaries on performance plus seniority, not seniority alone. | 60% | 36% | 3% | 1% |
| Restructure large school districts to include magnet schools as centers for math, science, etc. | 36% | 48% | 13% | 3% |
| Allow parents to choose from among public schools. | 35% | 40% | 18% | 7% |
| Keep schools open year round. | 29% | 45% | 21% | 5% |
| Eliminate undergraduate teaching degrees and require an undergraduate degree in an academic subject plus a fifth year stressing classroom experience. | 24% | 47% | 21% | 8% |
| Create a national board to certify new teachers. | 13% | 27% | 19% | 41% |
| Eliminate traditional grade levels and allow students to move faster or slower on various subjects. | 11% | 37% | 29% | 23% |

But might not mismanagement be standing in the way of U.S. workers? 3M's Jacobson, like most of his colleagues, doesn't believe so: "I think our management style has improved. We're using more of the whole person—the mind as well as the hands." But other company chiefs disagree. Charles Peck of the Ryland Group, a Maryland-based homebuilder, thinks managers are too often "distracted by short-term interests" when they should instead be creating a "quality attitude and culture" for employees. And more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than one top executive thinks labor quality and productivity suffer from management's atrophied knowledge of the brass tacks of operations. Says John Nichols of Illinois Tool Works: "We have too many managers in finance or marketing, not enough operational leadership." And Russell's Gwaltney groans, "We don't have enough manufacturers around. We have too many MBAs, and they don't know how to run a manufacturing operation."

As any sociologist knows, a malady in one part of the social organism usually means trouble for another. Realizing this, a number of respondents say that some workers aren't all they could be because of family trauma and events in the developmentally crucial early years of life. "A building is only as good as its foundation," says Richard Wollenberg of Longview Fibre, and for many workers the foundation is not solid. He adds, "The basic problem is parental neglect." Says Jerry Junkins of Texas Instruments: "In the long term we need to significantly improve preschool activities across the board, including health and nutrition, to try to make up for the results of the breakdown of the family unit."

**Q** **What is the most important step American government or business can take to improve the quality of the U.S. work force?**

**A**

| | |
|---|---|
| **Improve education** | **64%** |
| **Raise educational standards** | **16%** |
| **Give families more responsibility for education** | **5%** |
| **Give localities more control of education** | **5%** |
| **Pay teachers more** | **5%** |
| **Other suggestions regarding education** | **14%** |
| **Expand training programs for employees** | **11%** |
| **Improve incentives for workers** | **7%** |
| **Manage better** | **6%** |
| **Reduce government intervention** | **5%** |
| **Address the dissolution of the family** | **3%** |
| **Other** | **10%** |

Adds to more than 100% due to multiple responses.

As for which factors improve U.S. workers, a solid majority of CEOs cited higher education. Beaming over the crop of college grads that 3M attracts, CEO Jacobson thinks these youngsters enjoy "probably the best college and university education in the world." Like many of the CEOs, Robert Sharp of Boston's Keystone Provident Life thinks U.S. elementary and secondary education is in trouble. But, he says, "the situation for college graduates is not as serious."

It may be comforting that more CEOs think U.S. workers have improved in the past decade than think they have become worse. Yet how does that square with the widespread view that many U.S. workers still aren't up to world standards? W. R. Timken Jr. of steelmaker Timken agrees that American workers are getting the job done better than they used to, but he points out that "requirements may have outpaced the improvements." In other words, better may not yet be good enough. F


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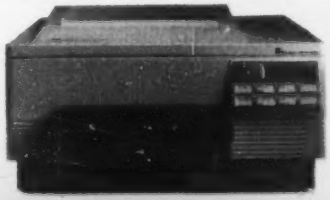

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